

OPERATOR

February 2011 Edition



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On the ropes. Read all about the adventures of WIOA female members in the water industry. More on page 6.



Kathy's Antarctic adventure. Find out more about it on page 7



Toowoomba floods. Story and more pics page 9.

Newsletter of the WATER INDUSTRY OPERATORS ASSOCIATION OF AUSTRALIA

From Cynthia's Desk

GIRLS GIRLS GIRLS GIRLS!!!

This sort of signage may turn men's heads for a different reason but in this edition of 'Operator' – the first for 2011, you will find more than usual about women who work in the water industry. Don't worry, you won't be getting any fashion tips, recipes or deep and meaningful's but I think you may be pleasantly surprised at what the supposed fairer sex gets up to as contributing participants in the water industry. You will find in this edition amongst our usual articles, stories contributed by female WIOA members and about female WIOA members. If you work with women in operational roles please ensure this edition of 'Operator' lands in their tray to flick through.

Unfortunately I must report that the proportion of WIOA female individual members has not grown significantly over the past five or ten years. In fact it has probably stagnated. I do not believe this is a reflection of the overall water industry but may be a reflection of the more hands-on and often physically demanding operational side. Let's hope that in 12 months time when we produce another women's edition of 'Operator' we have something different to report.

In 2011 we will attempt to break away from the norm and bring you themed newsletters on topics that you deem to be important. Remember 'Operator' is the newsletter for WIOA members – this is our community and a way to converse with people who have similar working experiences, shared frustrations and triumphs, and certainly challenges of keeping the wider community safe with fit to drink water and a clean environment. If you are reading this and think – wouldn't it be great to have an edition dedicated to, for example; WIOA members that have interesting hobbies; WIOA members under the age of 30; members that travel a lot; members with interesting plants or WIOA members about to retire etc, we'd love you to let us know!! Just send us a note with some article ideas and we will consider it. This edition has come about from that very process – WIOA female members wondering how we can address some unique issues that affect women in operational roles.

The 2011 weekend seminar and AGM is coming up in early March. As someone who has not missed a weekender now for countless years it came as a surprise to me when someone (a chick) mentioned that the weekender was not something she would ever consider attending because of the stories she had heard about previous events. I was a little taken aback by her comments but now that I think about, the attitudes of the whole industry about heaps of things have really changed over the years. The weekender isn't a boys club, sensible and serious conversations DO occur. The dinner is always a treat with quality food, great company, lots of laughs but most of all, a chance to catch up with old friends. Why not consider plunging in at the deep end and if you have never attended the weekend come along and see what it's all about. Weekends are precious to everyone especially if juggling a busy family, work and social calendar but the benefits of networking and discussing issues with people in the industry are immeasurable. If you are curious but have some doubts just call us to discuss and we are sure you will benefit from it.

This brings me to two more new initiatives we intend to introduce in 'Operator' in 2011. "Myth Busted" and "Then and Now!!" We will attempt to bring to you water industry urban legends and myths and dispel them.

We will also look back on equipment and methodologies of old employed in the water industry and compare them with their modern day counterpart. The first instalments of these new topics appear later in this newsletter.

Happy reading for now – I hope you enjoy this edition of 'Operator' and I look forward to hearing from you.

Cynthia Lim
WIOA Operations Manager

HANDY TIP:

(sometimes emails can provide us with interesting stuff!).

As always we frown on bottled water and fully support drinking tap water. If you need to seal a bag and can't find a rubber band or tie, and you are in possession of a bottle destined for the rubbish tip, you might like to try this.

How to seal a plastic bag and make it air tight!



Cut the bottle and keep the neck and top.



Insert the plastic bag through the neck and screw the top – Presto - Sealed!

PROFILE OF A MEMBER

Name: Katrina Slocum

Position: Water Filtration Plant Operator

Employer & Location: Albury City Council, Albury NSW

How long have you worked in the water industry and what attracted you to it? 3 years and 8 months. I got good marks in water subjects at University

What do you enjoy most about your job? The freedom to either work inside or outside.

What are the major challenges in your current role? Strength I guess. I can't lift as much as the boys.

How long have you been a WIOA member? One year

How do you relax? Fishing or going to a farm or having a quiet one.

Where do you live and what's the best thing about it? Albury Wodonga. The best thing is the Murray River, you can go swimming and fishing anytime

OK, A FEW QUICK QUESTIONS TO FINISH

Age: 27

Nickname: Kat

Family Status: Married

Pets: 1 dog, 5 birds, and 2 bearded dragons

Favourite food: Chocolate

Least favourite food: Brussel sprouts

Favourite TV show: Bones and the Big Bang Theory

Worst TV show: CSI

Favourite Movie: Love Actually

Favourite Musical artist/s: Shannon Noll

Favourite book: Don't like reading

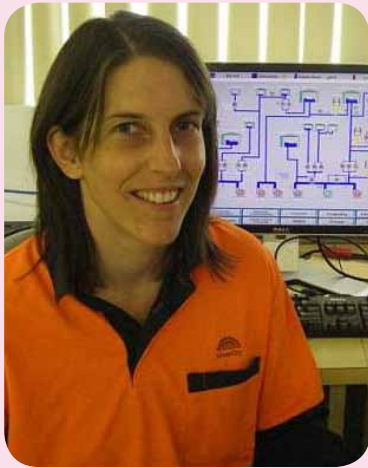
Ambition in life: Live life to the fullest and move out to the country.

Hobbies: Netball, Dancing, Fishing

Best Trait: Smile

Worst Trait: Talk too much

Four people to invite to a BBQ: My Hubby, Shannon Noll, Jack Thompson, and Shane Crawford



Myth Busted

In 2011 we introduce a new series of articles called Myth Busted. Members are invited to send in your thoughts on common water industry myths. Let's dispel those water industry urban legends and re-educate the wider water industry on issues that should no longer be in the realms of myth - to borrow from another TV show - 'The Truth IS Out There'.

Myth 1: It's hard to be a female in the water industry.

I have never felt that it is difficult for a woman to work in the water industry and today this is definitely not the case. Over the past ten years the number of women filling a broad range of roles in the industry has grown considerably. Not so long ago I would expect to be the only woman onsite or sometimes attending certain meetings, however, now I can say that this is not the case. To our male counterparts I will not bang on about the benefits that this brings to the industry.... not even about "being able to do more than one thing at a time"! The fact is the water industry is attracting female employees and is developing ways of retaining them within their businesses. One example is flexible working conditions that are compatible with commitments outside of work such as family life. This doesn't just benefit female employees as I am sure there are men out there that appreciate this flexibility too.



As the Water Industry progresses towards offering a professional career path with clear recognition of qualifications and competencies, as is the case in Victoria, with the release of the Best Practice Guidelines for Operator Competencies, this will further open opportunities for women to enter the industry and apply for roles in a level playing field.

I will not gloss everything over and refrain from saying that for a woman there are the times when "testosterone tone down" is required as the industry is still a predominately male work force. As was the case of the contractor that was still providing the "nude" calendar each year to hang in the control room or the scuffle occurring at the entry gate one afternoon. Generally these instances are few and far between and in my experience a sense of humour goes along way.

Upon discussing this topic with other women working within the water industry we are of the firm belief that this myth is well and truly



Contributed by Sallyanne Bartlett, Senior Process Scientist
Veolia Water Australia

OPERATOR PROFILES X 2

It is not often that we get a chance to meet two Operators' of the Year that work for the same company and have won the prestigious award consecutively. So when the opportunity arose while in Coffs Harbour last October, we just had to ensure we interviewed both Les and Ross and got up close and personal.



The wall of fame – Les Potter (L) and Ross Waugh (R) posing in front of NSW Operator of the Year poster at Coffs Harbour.



Colleagues of Les and Ross who spotted the poster in Wagga Wagga and paid due homage to their revered co-workers!!

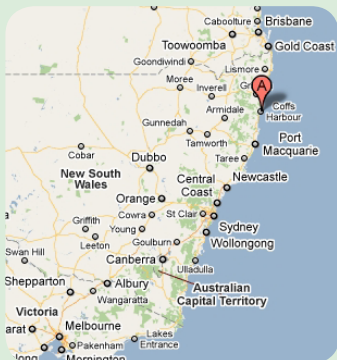
Profile of NSW Operator of the Year 2009

Name: Ross Waugh

Position: Superintendent
Coffs Harbour Water
Reclamation Plant

How long have you worked in the water industry and what attracted you to it?

32 long hard years. The attraction to the industry was via no permanent staff on the council wanting to operate an old, overloaded trickle filter plant, and as you do, being a casual member of staff on the Tar Truck (nine holes a day gang) I put my hand up,



got the job, and that's where it all started. Mind you, it wasn't the council I work with now.

What do you enjoy most about your job?

The camaraderie with the other operators, from this state and interstate, networking at the WIOA conferences, and providing an essential service to the community.

What did it mean to you to win the NSW Operator of the Year?

Recognition of my input into the design, equipment selection, commissioning and operability of the new \$97 million dollar Water Reclamation Plant at Coffs Harbour, and service to the community and the Water Industry for the past 30 years.

What are the major challenges in your current role?

Dealing with people with no interpersonal skills

How long have you been a WIOA member?

Three years

What advice can you give younger Operators out there?

In time the role of an operator be it Water or Sewage will be classed as a trade. With the ongoing advances in technology, so the need for trained, competent skilled operators will increase and hopefully the wages accordingly. In the next 5 years most of the older generation of operators will be retiring, leaving a void of knowledge and experience, so start picking the brains of those grumpy old operators. Just one last thing: a good operator always makes a poor engineer look good!

How do you relax? Beers, BBQ and Beach

Where do you live and what's the best thing about it?

I live in Coffs Harbour where there is no shortage of water at the moment. The best thing about it is its beaches and if you want to go 4x4ing its only a 5 minute drive and you're in the rainforest

OK, A FEW QUICK QUESTIONS TO FINISH

Age: 56

Nickname: Dogsa

Family Status: Married

Pets: 1 cat was supposed to look after it for a month for the daughter and that was 5 years ago!

Favourite food: The handbrakes BEEF casserole

Least favourite food: White meat

Favourite TV show: The IT crowd

Worst TV show: Any reality game show

Favourite Movie: Anything with Charles Bronson in it

Favourite Musical artist/s: Noddy Holder (Slade)- Led Zepplin- Deep Purple- Iron Butterfly – The Stones, CCR – America – The Eagles and of course Fleetwood Mac.

Favourite book: *Flack* by Michael Veitch

Ambition in life: Travel OZ and NZ

Hobbies: Frequency scanning, 4x4ing, aviation and gem fossicking

Best Trait: Always look on the bright side of life

Worst Trait: Switch off, when I know a person is bull sh**ting

Four people to invite to a BBQ: Billy Connelly, Bill Bailey, Sheriff John Bennell and Malcolm Douglas, what a mix!

Profile of NSW Operator of the Year 2010

Name: Les Potter

Position: Water
Superintendent Headworks,
Coffs Harbour City Council

**How long have
you worked in the
water industry and
what attracted you to it?**

Started as an apprentice plumber in 1971 & worked in Sydney for 10 years. Then wanted a change in career & lifestyle so I moved to Coffs Harbour & have worked for CHCC Water dept for 29 years.

What do you enjoy most about your job? The environment I work in is arguably the best in Australia, especially the hinterland where the Karangi dam & Water treatment plant is situated. I also enjoy the day to day problem solving & running of the plant, Dam & pumping stations.

**What are the major challenges in your
current role?** Electrical faults due to storms etc;
environmental restraints e.g. river extraction; low staffing levels

How long have you been a WIOA member?
For a year

How do you relax? Fishing, overseas travel, dining out

**Where do you live and what's the best thing
about it?** I Live at Moonee Beach about 12 km north of Coffs Harbour & with its own shopping centre I have no need to go into the busy city of Coffs. Also I am in walking distance to a beautiful inlet to a creek that runs between a headland and a long sandy beach. So you are able to either fish on the beach, rocks, creek or just whale watch from the headland.

OK, A FEW QUICK QUESTIONS TO FINISH

Age: 56

Nickname: Stumpy

Family Status: Married with 2 daughters & 2
granddaughters & another grandchild on the way in April 2011

Pets: No pets

Favourite food: Seafood

Least favourite food: Blue vein cheese

Favourite TV show: Two and a half men

Worst TV show: Desperate Housewives

Favourite Movie: Lord of the Rings: Return of the King

Favourite Musical artist/s: Beatles

Favourite book: I don't like reading

Ambition in life: As much travelling as possible

Hobbies: Fishing

Best Trait: Easy going attitude

Worst Trait: Picking teeth

Four people to invite to a BBQ: Jamie Oliver, Paul
Hogan, Elle MacPherson, Pat Rafter



Why Men Can Pee Standing Up

God was just
about done
creating humans,
but he had two
parts left over.



He couldn't decide how to split them
between Adam and Eve so he
thought he might just as well ask
them.

He told them one of the things he
had left was a thing that would
allow the owner to pee while
standing up.

"It's a very handy thing," God told
them," and I was wondering if either
one of you had a preference for it."

Well, Adam jumped up and down
and begged, "Oh, please give that to
me! I'd love to be able to do that!
It seems like just the sort of thing a
man should have. Please! Pleease!
Give it to me!" On and on he went
like an excited little boy.

Eve just smiled and told God that
if Adam really wanted it so badly,
he could have it. So God gave Adam
the thing that allowed him to pee
standing up.

Adam was so excited he just
started whizzing all over the place -
first on the side of a rock, then he
wrote his name in the sand, and
then he tried to see if he could hit
a stump ten feet away - laughing
with delight all the while.

God and Eve watched him with
amusement and then God said to
Eve, "Well, I guess you're kind of
stuck with the last thing I have left."

"What's it called?" asked Eve.

"Brains," said God.



ADVENTURES

Women in the water industry do get to experience some wonderful adventures that may not be the norm in a working women's life. Following are some short stories female WIOA members were invited to share.

On the Ropes - (diary notes to home)

Contributed by: Jill Busch, DBS/Aqualift Pacific

Survived the ropes training course!! Big exhausting (mentally and physically) days, but now I am more familiar with all sorts of knots, and the types of ropes and knots that can get you out of some tricky situations. Even how to wrap up the power leads/ropes so they don't get tangled... which I don't understand why they didn't teach you this in school!!?? So useful after vacuuming-hey...!! The part of the course that I was really worried about was the rescuing of 'my buddy'. I thought that with the extra weight etc it would be tricky, but all was well... well.. until I got my buddy down to the ground alive.. and then I sat on him!! Poor Darryl...



Jill rescuing her buddy Darryl.

The other challenge was the abseiling over the edge of a 15m high tank in Wauchope. I even managed to go down the flying fox with cries of protest that "no I am not going to look up.. or go any faster.. and I was going to stick to a 'middle aged woman's' speed...". To which the instructor replied, "Don't worry- many others have gone over at a 'middle aged' woman's speed.. but not many women have done this course!!".

After the course I got my new ropes clothes line fitted under the veranda. Now the boys at work are walking around with their bottom lips out, because I have banned the use of the dryer directly from the washing machine!! You would have thought that this simple request was like asking them to cut off an arm or something like that!! I even heard one of the boys yell to another that now they only have a max of 20min dryer time only... I also might have to give some lessons, on how to peg clothes on the line.... a few items were just hung over the line in absent minded hope that they will stay there!!! Ugggh boys!!!



Don't look up!!

A Water Industry Love Story

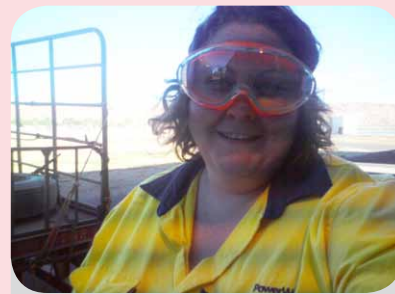
Contributed by Kristy Bourke, Water Treatment Officer, Power and Water Corporation NT

I was asked to share my experiences and adventures that I have had while working in the water industry. Well... mine is more like a love story - some people would say 'sad' I know, but really it's not!

The first day I started work at Goulburn Valley Water I had the pleasure and the privilege of loving what I do!!! Sure there have been days when it's frustrating and challenging but what job isn't? How amazing is it when people ask you what you do and you get to say "I make the drinking water or I treat the sewerage?" The looks of confusion and humour and then the ability to entertain people with the details of your job; the arguments you have when people say you can't possibly make the drinking water - I just say "look at the source would you drink that?" Stories of the amazing people that you get to work with along the way; stories of cows and crocodiles, yes I said croc..... in wastewater ponds, that strange look in response is one I've grown used to.

My job has taken me across the country having worked at Goulburn Valley Water and Wannon Water in Victoria and currently Power and Water both in Alice Springs and Darwin (If it really was a love story people might talk!).

Travelling to the NT has been a life changing experience. I get to work in the places that Oprah visits!!! Yulara, The Rock, Kings Canyon, Alice Springs, Tennant Creek, Katherine and Darwin - My job (my love) has shown me Australia - but better than the adventure has been the people!



Kristy at work



Kristy at play

The people that have shown me the way, supported, encouraged, and entertained me - from that first chance encounter with Darryl Johnston, to John Harris telling me that "I want you to have a head like a full back when we are 1 point up with a minute to go in the final quarter of a grand final and the ball is in the backline", to the people of the Territory who taught me to recognise what's important and worry about that, but not everything. It IS the people that make the water industry great.

At the end of the day my only choice is to succeed, because it is the people I work with that are making me great!! I know it's a bit long and for that I'm sorry - probably something to do with that extra "X" chromosome.

Choose your own adventure in the water industry....

Contributed by Kathy Northcott, Process Operations Engineer
Veolia Water Australia

Between 2000 and 2004, whilst studying for my PhD, I was lucky enough to be involved in the development of a water treatment plant for use during clean-up of cold regions contaminated sites. As the water engineer for this project I designed and commissioned a mobile, multi-stage water treatment process to treat melt water from Antarctic rubbish dumps. The water treatment system was transported to Casey station, Antarctica, in December 2002 and commissioned on-site.

The system was operated in the field November 2003 to January 2004, as part of the clean-up of an abandoned rubbish dump located near Casey station. I was the water treatment engineer for the clean-up project and was responsible for operation of the plant as well as water quality verification and training of operators. The water treatment system, substantially based upon a drinking water treatment plant, was designed to treat contaminated waters, removing suspended particles via coagulation, settling and filtration. Dissolved metals were removed using ion exchange. The water treatment plant performance was optimized based on the results of three years of intensive research into low temperature water treatment methods.



End of summer, several metres of snow melted away to reveal a big ugly rubbish dump. How the landscape changes over the course of the summer.

In the Drink! - (diary notes to home)

Contributed by: Jill Busch, DBS/Aqualift Pacific

Well it seems like I have been on the road for such a loonnngg time... but maybe it has only been about 4 weeks. The reason that it has seemed a long time is that I have had to be the 'substitution' for the team, as we have had one diver 'down' or off, for various reasons for the majority of this last road trip. So I have had to lug the weight belts lots of times (uugghh!!- still not my favourite), run up and down the ladders for supplies, entertain the 50 tonne crane drivers (so they don't fall asleep waiting for the next direction to come down from above), drive here and drive there.. etc... All in sunshine or rain.

The recent rainfall (and floods) has made the country so green, and so far we have been lucky to complete our jobs without dramas. Sometimes the truck has to take a flying start to make it up dirt tracks without the threat of getting bogged.

During our work at Nowra, I was presented with a dry suit that was my size. It had been repaired with new seals around the cuffs. So one day we were cleaning at an in-ground tank, with a very easy access platform and not too deep, so I thought I would put the suit on to see if it was water tight. More so that it was hot outside, and the water (yes drinking water!) looked so refreshing... So I had a wallow in the shallows testing the seals and releasing the air. The guys then threw me a mask and air cylinder and said "off you go...you may as well test it out under water..!!" Shock horror!! So off I went for my first ever dive - relax Mum..all under the close supervision of BJ (who is a dive instructor). I heard later that the guys had a game of rock/paper/scissors, on who had to go in and get me if I got into trouble!! Anyway after a while, I managed to calm down and actually let go of the platform railing. Just when I was getting my breathing under control, Sammy (who was working in the tank) swam over and grabbed my leg from behind. The boys said that they could hear the squeal I made, even from 3m under water!!! The boys then felt sorry for me, and gave me the underwater camera to take my mind off the over excessive breathing I was doing. They gave me the challenge of doing some underwater photography of the tank floor, post, platform etc (with a few extras taken of me by me being brave and actually breathing!!) All good fun, and very refreshing I must say.



In the drink!

A few observations from my dive experience I would like to share with you... bubbles are so noisy under water - deafening really.. or is that because of the excessive breathing!!??; earrings and long hair is a handicap when trying to take off tightly fitting hoods and neck seals – no wonder the guys are bald or have short hair; the mask gives you a red nose (– or maybe the excessive breathing again!!); it is really hard staying upright if you have air in your suit, and if given the opportunity to get in around your feet – kind of like bobbling like a fishing float if given the chance. Finally a very important lesson in this whole exercise was... being told by BJ on how to remember how to turn on and off a gas bottle in the correct directions... ready for it.. it's a good one! 'Righty tighty – Lefty loosey!'. I wish I was told this in primary school!! Even in the showers this rhyme comes in handy!

Dolphins, Lab Rat, Rabbits and Circus Tents!

Contributed by Kristine Hunter

Coordinator – Network Performance, East Gippsland Water

When I was growing up I wanted to be an astronaut or work on a submarine. Back in those days (over 30 years ago) Australia didn't have a space program so the astronaut dream was a no-show! Also back in those days, women's roles in the Navy were fairly well restricted to land-based administration type work – boring!

Then I decided that I wanted to live on a Pacific Island and work with dolphins and whales; so I went onto Tertiary education and got a Bachelor of Science Degree (Chemistry with Aquatic Biology). Look out Jacques Cousteau, here I come! A dodgy ear meant that I couldn't Scuba dive - so there went another dream!

I got a job with the State Water Laboratory / Rural Water Corporation as a lab technician; hundreds of water samples – day in, day out! I eventually moved from the lab into Environmental Consulting – a city kid trying to tell country folk how to manage their waterways and solve their salinity / nutrient problems (all via computer modelling of course!).

State Water Laboratory eventually became Water Ecoscience and I continued to work in the Environment area. Many weeks were spent out in the field, taking water samples and analysing them in the motel room at night using nifty little portable laboratory kits. I also went back to school and obtained a post graduate degree in Environmental Management.

After many years with Water Ecoscience (and subsequent aliases), I moved onto Thiess Environmental Services (Woori Yallock) in the Administration area. This was a new pathway for me again – from lab rat to environmental consultant to administration (payroll, accounts etc). Thiess kindly let me keep my fieldwork skills up by letting me gather the data from an old weather station in Healesville on my way to work once a month! I had a lot of fun winding up (literally) mechanical monitoring equipment!

After four years or so with Thiess, my husband and I had bought a lovely bush block just outside of Buchan in East Gippsland, Victoria. It was with regret that I said goodbye to the great crew at Thiess! (Our bush block is now home to RimHil Rabbits - a Commercial Meat Rabbit Farm – just a quick plug!)

I started at East Gippsland Water (EGW) as an Administration Assistant. After about a month of this, I was offered of a full time position as Water Quality Technical Officer. After nodding and smiling during a discussion with the GM on terms and conditions (good salary, phone and car!!), I said I'd think about it and rushed out to call a friend and ask her what the heck were coliforms! What did 'potable' mean, and how hard

would looking after water quality and public health be?!? I was certainly no microbiologist or engineer! However, as a Scientist (with an especially big ego), I was confident that I could handle anything they threw at me!

And I did! I developed a drinking water quality monitoring program, trained staff on correct sampling techniques, advised senior management on water quality results and emerging issues and was part of the Safe Drinking Water Taskforce that helped develop the current Safe Drinking Water legislation.

One project that I am proud to hang my hat on is the installation of shade cloth covers over four of our water storages to minimise algal growth. EGW had enough faith in my crazy idea to install the first shade cloth cover over the Bemm River raw water storage in 2001. From the success of this, a two year study was conducted with CSIRO to determine the overall impact of covering storages.

Too many details but the full report is available on the CSIRO website. It was a great success and I still get a thrill when I go to any of these sites and see my 'circus tents'!



Shade Cloth - "Circus tent"

After 10 years of drinking water quality, it was decided I needed a change! For a brief period I was the Acting Team Leader for our WTP Operators Team – a wonderful challenge and I learnt an awful lot from these guys. Then I moved away from water treatment and started to work on monitoring pipe network performance – water and sewer. My days are now spent analysing data regarding sewer blockages and overflows, water pipe bursts, customer interruptions and reporting etc, with the odd field trip thrown in (funny how the guys are keen to show me sewer blockages!)

Although I haven't yet aspired to the dizzying heights of becoming a water industry Operator - maybe the next step? - I have had some interesting jobs, learnt an awful lot of stuff and made some wonderful friends in the water industry. As can be seen, there is opportunity to undertake a wide variety of jobs in the water industry!

Flash flood damaged Toowoomba Regional Council's sewer infrastructure



Toowoomba's sewer infrastructure copped a beating from the flash flooding that occurred on January 10.

Manholes were covered with flood water, lids were forced open and sewer trunk mains were flooded to capacity. Toowoomba lost two sections of 450mm sewer trunk main and three sections of 150mm sewer reticulation pipe.

The two sewer trunk mains destroyed were at crossings of the creek which carried the flood waters. Large objects such as shipping containers, silos, cars and a 6m long gas tank were washed down in the flood waters and are believed to have caused the sewer mains damage.

Toowoomba Regional Council's sewer maintenance crews worked round the clock to restore the sewer infrastructure. At one of the destroyed sewer trunk mains, the maintenance crew salvaged 80% of the broken pipe by cutting and welding the good sections together. After installing several supports, a solid temporary reconnection was made.

The other sewer main break was managed by bypassing the flow with two 120L/s diesel pumps. Toowoomba had hired four of these pumps in December in anticipation of a heavy wet season. This allowed maintenance crews to quickly bypass the sewer mains break without causing a large amount of sewer surcharge.



The temporary re-connection of a 450mm sewer trunk main at Griffiths St after salvaging 80% of the pipe.



Two 120L/s diesel pumps used to bypass a destroyed section of a 450mm sewer trunk main on North St.



450mm Sewer Trunk main section washed 100m downstream. The green shipping container in the distance may have been the object that destroyed the sewer main.



Water going under and over

Contributed by **John Paulger**, Unit Leader Wastewater Operations
North Water Services, Toowoomba Service Centre

WIOA Charity Golf Day 2010



The entire golf group ready for action.

The Charity Golf Day held in October at Kilmore, Victoria was well attended by Members and the water industry. It was a nice change from previous years to see the sun shining, no ferocious winds and the course in great shape with all the rain. Congratulations to the winning team – ProMinent comprising Alan McIntyre, Dale Campbell and Roland Heatley. Also a special congratulations to Alan as he played at the very first golf day in 1999 and was the winner at that time. It's taken him 11 long years to get back the trophy!

Thanks to all the sponsors of the WIOA Charity Golf Day 2010.

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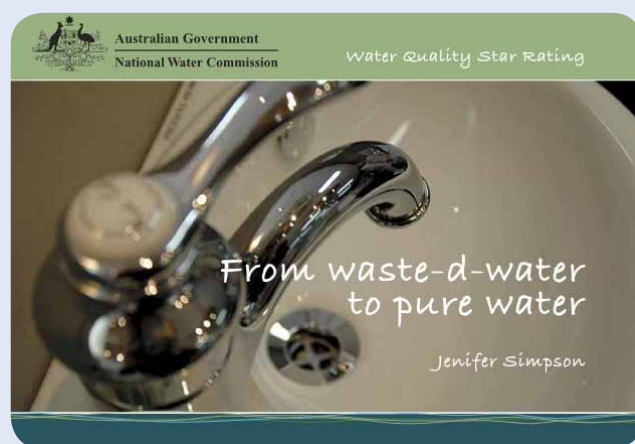


Prominent – we won!!



Second place team

From waste-d-water to pure water



By now all WIOA Members will have received a copy of Jenifer Simpson's book entitled "From waste-d-water to pure water". The Committee agreed to purchase a copy for each WIOA Member after the National Water Commission advised that a reprint of 10,000 copies had been undertaken.

WIOA believes this book to be a valuable resource for all Operators and is supporting its national circulation. We trust you will make use of it.

This publication has previously been released throughout south-east Queensland and contributes to an improved public understanding of recycled water. It provides easy-to-understand information on the issues underlying water recycling and treatment processes.

The International Water Association (IWA) named the book 'best popular presentation of water science' during its major congress in Vienna in 2008. The booklet also has been published by the Water Reuse Association of America for distribution in the USA.

For members wishing to access the booklet electronically you can find an EBook at

www.scec.org.au/water-booklet/index.php or a pdf at

www.nwc.gov.au/www/html/1050-from-waste-d-water-to-pure-water---reprint.asp

THEN AND now

A new series of articles we would like to commence in 2011 is titled 'Then and Now'. Let's compare methods, processes and technology from yesteryear with what we have today. Members are invited to send in your 'Then and Now' photos and stories to info@wioa.org.au

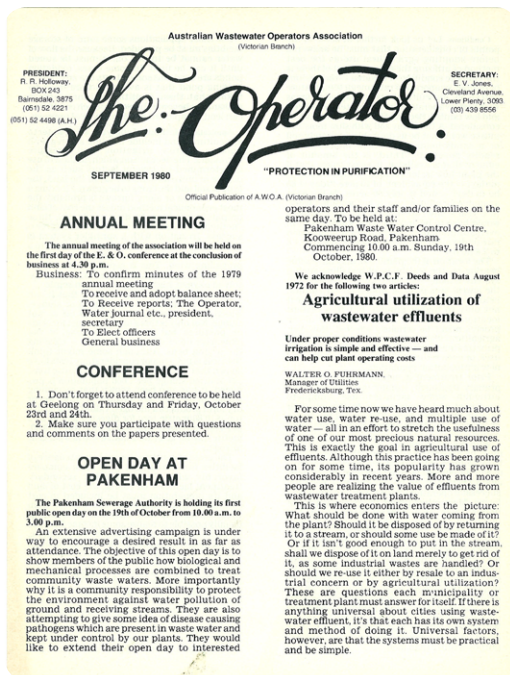


Image of our 'Operator' mag above - September 1980. The look of 'Operator' has changed significantly over the years from just black and white to full colour and pictures. We believe the content, reminders and articles however still remain true to Operator issues.



Orange City Council Wood Stave
Water main Circa 1890.



Pipes

Pipes have changed significantly over the centuries from hand dug bare earth trenches, hollowed out logs and all manner of other materials used to convey water and sewerage. Today the materials of choice are high pressure plastic, steel and concrete.



Crew on pipes. Manual pipeline
construction in the early 1900's.



Mechanised pipeline
construction of today

A Funny Snippet from a Woman in the Water Industry

Several years ago my sister was visiting. She works in finance at the "high end of town" so to speak. On this particular day – and it is embarrassing to say – my mum was doing my ironing. As my mother was pressing my Hard Yakka work pants, my sister asked "Whose pants are those", noting that they were unusually small and could not possibly belong to dad. Mum told her they belonged to me and were for work. My sister laughed and then said "Oh really" seemingly puzzled she then asked "What shoes does she wear with those pants"? Mum just pointed over by the door where my pair of size four steel cap work boots were right where dad leaves his work boots. I am not sure what she was expecting maybe some type fancy designer label high heel number! The fact is she had no idea that women go to work in Hard Yakka pants and steel caps - the concept was foreign to her - something I found very amusing. Girl's maybe there is an untapped commercial market out there – a shoe and handbag line to coordinate with Hard Yakka work wear!!!!

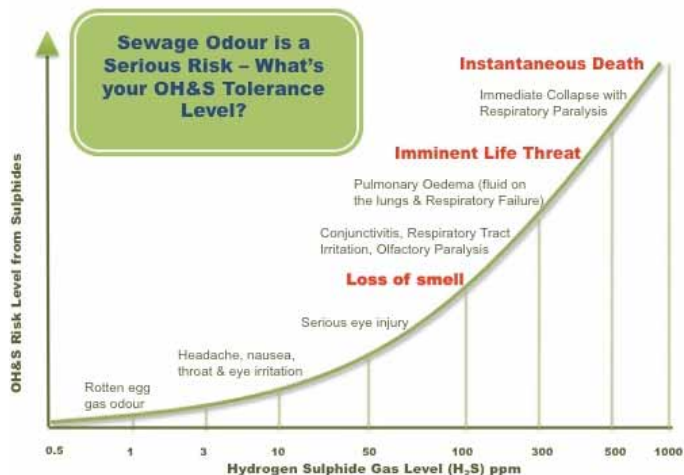


Contributed by Sallyanne Bartlett, Senior Process Scientist
Veolia Water Australia

What level of RISK do You face?

Most water authorities react to odour complaints, however when we ask for an OdaLog file to determine the scope of the problem, quite often they don't exist. Where OdaLog files do exist, it is not uncommon to see daily average sewage odour levels at manholes and pump stations above 100ppm and peak odour events even in the 500 – 1000ppm range.

At 100ppm of hydrogen sulfide gas (H_2S) the sense of smell is lost, putting people at further risk. At 1000ppm, one whiff causes death. In the Middle East where we have undertaken work, it is not uncommon for the water authorities to lose about 3 operators each year pulling up manhole covers.



Our staff have witnessed a number of operators installing OdaLog instruments with their head in the manhole. When asked about the risk they are taking, they have all been unaware of the risk, despite having undertaken confined space training. The OH&S personnel in many water authorities also appear to be unaware of the risk.

A simple pump start on a sewer with a long detention time and high ground temperature can easily send a peak odour event to a manhole with concentrations well beyond the threshold that causes loss of smell. Sewers with long detention times and high ground temperatures will be most likely to generate the highest sewage odour levels.

The sewers in coastal holiday region with transient populations over summer are also likely to generate high odour levels. Sewers receiving high BOD levels such as winery, abattoir or food wastes will often generate high levels of odour.

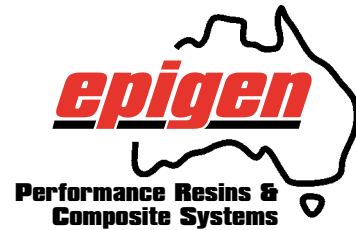
Where there is odour, it is likely there will also be methane gas. Both gases are potentially explosive.

High levels of sewage odour can be minimised through appropriate management. Properly managed odour control in the sewer system, will save water authorities money from reduced infrastructure corrosion and there will be less complaints from the public. That saving in most cases will be far greater than the cost of the odour control.

Most importantly, safety in the workplace is the number one goal and operators need to continually think about the potential dangers associated with any of their actions when working in or around sewers.

Contributed by **Ross Chandler**, Managing Director, Biosol.

Corporate Member News



TIP #1: Concrete Coatings

If acid etching or the concrete has been scavenged or exposed to low pH chemicals, recondition it prior to coating. Therefore the boundary layer of cement does not come away thus causing failure of the coating.

To find out more visit

www.epigen.com.au



WE CAN REDUCE WASTEWATER TREATMENT OPERATION COSTS

- Energy Costs Reduced By 25-30%
- Sludge Reduced By 15-20%
- Maintenance Reduced By 20-25%

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5th Annual WIOA NSW Water Industry
Conference and Exhibition.
Learn how to reduce your
operation costs!!**

Web: www.ecocatalysts.com.au



Corporate Member News



EasyFill™ - saving water and money

EasyFill™ is a patented GPS data logging communication device that is easy to use and saves water authorities time and money. The EasyFill™ device captures every fill and drop job by a water carter and removes the need for manual logs to be kept and submitted to the water authority.

Designed to monitor and bill water carters for water usage, EasyFill™ was developed by Data Collect, in consultation with Yarra Valley Water and savewater!® Alliance. It is rapidly being adopted by water authorities across Australia as the best way to manage their water supply networks.



The advantages of installing EasyFill™ devices on water carter trucks are numerous. Some of the biggest include:

- Reducing the amount of "unaccounted water"
- Reducing repair costs from pipe leaks and ruptures
- Reducing administration costs as well as reducing fuel and road usage costs
- Increasing control over water quality and safety
- Improving customer service
- Improving hydrant management

Currently this new system is being rolled out throughout Victoria and one of our member councils, Yarra Valley Water, has so far installed over 230 EasyFill™ units that are yielding significant income. Several hundred more trucks will be installed by other Victorian water utilities over the coming months.

For more information about how easy it is to purchase and install EasyFill™ devices contact James Link, National Marketing & Member Programs, savewater!® Alliance at

jlink@savewater.com.au

The Change Will Do You Good

Turn to Johnson Screens for new ideas that lowers your costs and increase productivity

The plant engineer approached Johnson Screens® who came up with a solution utilising their Triton™ Underdrain filters.

Due to the small slot size of 0.25 mm, the need for supporting gravel was eliminated. The collection area of the screens' surface is up to 108% of the total filter floor area, this means flow through is unimpeded, which dramatically reduces backwash time, resulting in a better performing filter bed.

The sturdy stainless steel construction of the Triton Underdrain ensured a long trouble free life for this treatment plant.



Failing nozzles.



Bubble test - note the uniformity.



Covering the Triton Underdrains with sand.

www.johnsonscreens.com
Ph: 07 3867 5555

REMINDER: AGM & Weekend Seminar 2011

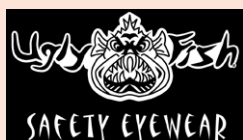
Get your registration forms in!



The 2011 weekend seminar & AGM will be held at the Foothills Conference Centre in Mooroolbark, outer suburbs of Melbourne. For new WIOA members this is your opportunity to meet other members and learn about the latest technologies in a relaxed and friendly atmosphere. The costs for the weekend are absolutely zero, as long as you can get yourself there and home again. From lunch Saturday to lunch Sunday the weekend is on WIOA – just another benefit of being a WIOA member.

The confirmed Corporate Member Presentations are:

Ugly Fish Safety Eyewear will discuss “Protection with Attitude”



Jonoco will amaze us with Portable Chemical Dosing!



Hydro Innovations will present “Self Primers – the future in waste water pumping”



The **forum** topic will be Operator Networks around Oz. We wish to invite all Members who have wanted the opportunity to get sub-groups organised due to similar job roles or general geographical areas together. WIOA is here to help.

A site tour of Melbourne Water’s Winneke Treatment Plant will also occur during the weekend.



Young Water Industry Operators – We Want You!!

Are you passionate, committed and enthusiastic about the water industry and want to contribute to WIOA?

WIOA is seeking young WIOA individual Members (under the age of 35) to share your views, ideas, opinions and plans via the establishment of a young operators group.

This is your opportunity to have your say, to get involved, to network amongst peers and gain knowledge from an experienced community. WIOA presents numerous operator based events and often the youth agenda may be overlooked – or is it? We need you to tell us – your input is valued and could see the improvement and development of key events as well as other beneficial resources to Operators.

If you wish to make a contribution to our ever changing industry then come along to this year’s Weekend Seminar and join the inaugural young operators group. If you are unable to attend the seminar but wish to contribute please contact WIOA with your details so we can include you on any future events.



The National Quality Council has endorsed the proposed changes to the Water Training Package (NWP07V2) as outlined in the Case for Endorsement. These changes relate to;

- addition of two new elective units for water meter installation and maintenance to the Certificate III in Water Operations
- replacement of generic elective units of competency in the Certificate III in Water Operations with more specialist technical elective units
- addition of new and replacement elective units of competency for hydrography
- replacement of large elective units of competency for water and wastewater treatment and water quality at Certificate IV with more specialist elective units
- rationalisation of four elective units of competency for asset maintenance in the Certificate III in Water Operations

See your State Training Authority for respective implementation processes. NWP07V2 is now available to download from the National Training Information Service (NTIS) website.

Government Skills Australia have now uploaded the women in water video and brochure material developed from the Pathfinders project.

Waiting for an Opportunity to Surface? Rise up with a career in water! The brochures and videos showcases a variety of job roles at a number of locations throughout Australia. It’s a real eye opener to the diversity available in this industry.



Should you wish to receive copies of these materials free of charge, please contact GSA: call 08 8410 3455 or email krystle.rowland@governmentskills.com.au

beyondblue launches an ONLINE Men's Shed



The Shed Online is a new website that aims to replicate in the online space, all the positive things men get from being in their own sheds or in a community Men's Shed.

Chairman of beyondblue: the national depression initiative, The Hon. Jeff Kennett AC, says the inspiration for The Shed Online comes from the 400 Men's Sheds which are thriving Australia-wide.

"In those sheds, in towns across the country, men can get together, work on projects shoulder to shoulder, learn new skills and if they feel comfortable, they can talk to one another about light-hearted or more serious issues," Mr Kennett says.

"My shed is very important to me because I'm a keen gardener and I'm a very, very amateur carpenter. It's where I house my tools and my paints, bits and pieces which I need to work in the garden."

Patron of the Australian Men's Shed Association and Australia's "First Bloke", Tim Mathieson, encourages all men to get involved in The Shed Online.

"My shed's a temple and being there is great for my mental health," Mr Mathieson says. "The Shed Online will reach many more men, especially those in rural and remote areas."

"Even if you're a bit shy at first, you'll be able to chat to mates, get information about a whole range of topics including health, learn about DIY projects and hopefully, eventually, you'll feel like you belong to this community or club... and it doesn't matter where you live."

The Shed Online is a joint project of beyondblue and the Australian Men's Shed Association (AMSA), and is funded by The Movember Foundation.

Co-founder of Movember Luke Slattery says: "Every man needs a shed, but not everyone has one, so we're building Australia's biggest shed and it's online – the more men, the bigger the shed!"



Join up and join in at www.theshedonline.org.au.



Have you paid your 2011 WIOA membership?

**WIOA MEMBERSHIP
HAS MANY BENEFITS.
IT NOW ALSO HAS ITS
REWARDS!**



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Funny

~A Cup of Tea~

One day my mother was out, and my dad was in charge of me.

I was maybe 2 1/2 years old. Someone had given me a little 'tea set' as a gift, and it was one of my favourite toys.

Daddy was in the living room engrossed in the evening news when I brought him a little cup of 'tea', which was just water. After several cups of tea and lots of praise for such yummy tea, my mum came home.

My dad made her wait in the living room to watch me bring him a cup of tea, because it was 'just the cutest thing!' Mum waited, and sure enough, here I came down the hall with a cup of tea for Daddy; and she watched him drink it up.

Then she said, (as only a mother would know), "'Did it ever occur to you that the only place she can reach to get water is the toilet?'"



New Members

Welcome to the following people and companies who have recently joined our Association as a Member or Corporate Supporter.

New **Individual Members** include:

Tim Ditchfield, Liz Kauter, Rick Pratt, Jonathan Thirkell, Kabilan Govindarajulu, Justin Simpson, Keith Wade, Michael Higgins, Paul Welsh, Karl Simmerlie, Philippe Cussinet, Michelle Timmins, Dennis Verstandig, Nathan Bovalino, Daniel Clarke, Matthew Cotter, Scott Freemantle, Matthew Goodman, Joshua Simm, Steele Wilson, Julian Dalzotto, Dylan Hetherington, Christian Phillips, Elysia Butler, Joshua McIndoe, Peter Robinson, Clinton Fitzgerald, Gary Patton, Julian Propsting, Matthew Brewer, Wayne Henry, Anthony McNair, Ben Mutton, David Clegg, Paul Steven Jones, Jan Cashion, Barbara Beddow, David Button, Barry Ryan, David Wolfenden, Nathan Koeing, Clinton Dean, David Johnson, Phil King, Douglas Miller, David Miller, Brian Chislett, Graeme Bayliss, Ben King, Paul Meredith, Steve Carter, Karen Stacey, Ron Markovic, Tony Bellette, Russell Wilkie, Tony Milikan, Peter Hopkins, Jay Withnall, Chris Sheehan, Michael Grahl, Brent Josling, Matthew Leitis, Simon Copley, Scott Plant, Wilson Lee, Bradley McCann, Raakesh Patel, Shannon Smith, Jennifer Benc, Vladislav Gromov, Stephen Cuthill, Shane Duncan, Warren Smith, Glen Sheekey, Fiona Pfeil, Harold Smythe, Darryn Jones, Ross Jennings, Kevin Loh, Andrew Musumeci, Alan Jones, Ross Hay, Shane Dunne, Paul Watson, Laurie Dalby, Wayne Funnell, Michael Summerell, Glen Herlihy, Michael Dixon, Shane McCrohon, Jason Seth, John McFarlane, Wayne Henney, Wendy Peterson, Tom Doonar, Clinton Szlag, Ron Cooney, Troy Shaw, Dylan Parish, George Kaithakkottil, Miguel Escobar, Greg Aldridge, Kerrie Hayes, Roland Gineste, Tim Hathaway, Ross Davis, Ben Attwater, Ken Barker, Allan Barlin, Kane Beauchamp, Barry Benson, Stuart Brook, Phillip Burns, Matthew Burton, Trevor Darcy, Matthew Field, Kim Freeman, Lauren Grant, Martin Haynes, Donald House, John Houston, Steve Jones, Brennan Jones, Ben Keen, Tyrone Kennedy, Michael Lewis, Chris Long, David McDonald, Peter McDonald, Jason McManus, Fred Mortel, Wayne Mulley, Bob Palmer, Tom Phillips, Mark Ready, Brendan Rook, Mal Sheather, Alison Spice, Jimmy Stokes, Matthew Temple, Glenn Trimmer, Nigel Whittingham, Rob Williams, Peter Woods, Ben Litchfield, Claire Kolokas, Bernd Landmann, John Rogojkin, John Byrnes & Lale Rogeon.

New **Corporate Members** include:

Promains, Redox, Omron Electronics, Control Microsystems, Starky Constructions, United Group Infrastructure, Pump Systems, EcoCatalysts, ABB Australia, Waters Marine, Austeck, Biowish Technologies, Savewater Alliance, Parasyn Controls, Apex Envirocare, Paradox Ignited, Measure-Met & SMC Pneumatics.

New **Utility Corporate Members** include:

Cassowary Coast Regional Council, Orange City Council, Port Macquarie Hastings Council & Parks Shire Council.

Coming Dates 2011

| | |
|----------------------------|--|
| 1 March | Applications for PASS Award close. |
| 5 & 6 March | AGM & Weekend Seminar Foothills Conference Centre, Mooroolbark |
| 16 March | Coagulation/Flocculation Seminar Commercial Club, Wagga Wagga |
| 30 & 31 March | 5th Annual WIOA NSW Water Industry Engineers & Operators Conference, Newcastle |
| 12 April | Distribution Systems Seminar Shepparton |
| 14 April | Distribution Systems Seminar Alice Springs, NT |
| 18 April | Distribution Systems Seminar Darwin, NT |
| 11 - 13 May | WIOG NZ Conference, Queenstown |
| 1 & 2 June | 36th Annual Queensland Water Industry Operations Workshop, Toowoomba |
| 20 July | Applications for 2011 Kwatye Prize close. |
| 7 & 8 September | 74th Annual Victorian Water Industry Engineers & Operators Conference, Bendigo |

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Next Edition

Article Contribution Deadline for the May 2011 Edition is April 15 2011.

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